

Amendments to the Specification:

Please replace paragraph [0006] with the following amended paragraph:

[0006] However, such devices which are known from the prior art and are considered to be generic have the disadvantage that, in order to achieve an absolute magnetic length coding, typically at least two parallel tracks of the length coding have to be provided in order to form a useful length resolution for the desired absolute coding. As a result, however, on the one hand the carrier unit is problematic to produce (and in particular is still not very suitable for curved carrier units provided with the length coding), and also the sensor head that cooperates with the ~~magnetic quantity~~ magnetic length coding is bulky and difficult to handle and is thus potentially difficult to guide and control.

Please replace paragraph [0007] with the following amended paragraph:

[0007] A further disadvantage of absolute codings, particularly those which are generated by means of a so-called random code or pseudo-random code, is that, on account of a relatively ~~unsymmetrical~~ asymmetric distribution of coding sections magnetized with the respective polarity, magnetization inhomogeneities may occur, particularly with regard to a so-called intersymbol interference (the magnetic signal of smaller poles is impaired by adjacent large areas, that is to say a number of areas having identical poles). This in turn adversely affects the reading reliability of the carrier unit.

Please replace paragraph [0049] with the following amended paragraph:

[0049] This signal then arrives at a further decoding unit 28 which determines from this bit sequence, ideally using an ~~EPROM-~~ EEPROM-stored table, where (i.e. at which point along the

resolution of 0.5mm steps achieved by the interpolation) the first pole change takes place, that is to say the first change in the bit sequence from 1 to 0 or from 0 to 1. Within the context of the present invention, this determines the fine position (in the example of embodiment this means that, in the event of a pole change after the first bit, the fine position would be 0mm, after the second bit 0.5mm, after the third bit 1mm, etc.). The fine interpolation is periodic with 4mm.

Please delete paragraph [0079] in its entirety.